



2643.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : George Nichols et al.
Serial No. : 09/458,248
Filed : December 9, 1999
Title : AUTOMOBILE PILLAR ELECTROACOUSTICAL TRANSDUCING

Art Unit : 2643
Examiner : Suhan Ni

17/Response
1-20-04
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Hon. Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

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JAN 14 2004

RESPONSE C TO ACTION OF OCTOBER 8, 2003

Technology Center 2600

Dear Commissioner:

Responsive to the Office Action dated October 8, 2003, reconsideration of the rejection of claims is respectfully requested in the light of the following authorities and remarks.

3. Claims 1-3, 5, 6, 8, 10-14, 16, 17 and 20-24 stand rejected under 35 U.S.C. §102(e) as being clearly anticipated by Doug Newcomb. Regarding claim 1, Newcomb is said to disclose an acoustic assembly on page 23 comprising an electroacoustical transducer and an acoustic element separate from the transducer and structured to improve the acoustic performance of the transducer.

Regarding claims 2 and 3, the reference is said to further disclose the acoustic assembly wherein the acoustic element is a two-ended waveguide.

Regarding claims 5 and 6, the reference is said to further disclose the acoustic assembly wherein the acoustic assembly has a ported acoustic volume.

Regarding claim 8, the reference is said to further disclose the acoustic assembly wherein the acoustic assembly has a sealed acoustic volume.

Regarding claim 10, the reference is said to further disclose the acoustic assembly wherein the vehicle pillar is an A-pillar. Regarding claim 11, the reference is said to disclose a

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structural automobile pillar containing an acoustic assembly, said acoustic assembly comprising an electroacoustical driver and an acoustic element as claimed. Regarding claim 12, the reference is said to further disclose the automobile pillar wherein the vehicle pillar is an A-pillar. Regarding claims 13 and 14, the reference is said to further disclose the automobile pillar wherein the acoustic element is a two-ended waveguide. Regarding claims 16 and 17, the reference is said to further disclose the automobile pillar wherein the acoustic assembly has a ported acoustic volume. Regarding claim 20, the reference is said to disclose an acoustic assembly comprising an electroacoustical transducer and an acoustic element said to be a waveguide or grill separate from the transducer and structured to improve the acoustic performance of the electroacoustical transducer as claimed. Regarding claim 21, the reference is said to disclose a trim element for covering a vehicle pillar, the trim element forming an acoustic assembly. Regarding claim 22, the reference is said to further disclose the trim element wherein the acoustic element is a two-ended waveguide. Regarding claim 23, the reference is said to further disclose the trim element wherein the acoustic assembly is an acoustic volume. Regarding claim 24, the reference is said to further disclose the trim element wherein the vehicle pillar is an A-pillar. These grounds of rejection are respectfully traversed.

The rejection based on 35 U.S.C. §102(e) is inapposite. These provisions relate to a rejection based on the filing date of an earlier filed application for patent. The reference here is a publication. We shall assume that rejection under 35 U.S.C. §102(b) was intended. If that were the intended ground of rejection, that ground of rejection is respectfully traversed.

"It is well settled that anticipation under 35 U.S.C. 102 requires the presence in a single reference of all of the elements of a claimed invention." *Ex parte Chopra*, 229 U.S.P.Q. 230, 231 (BPA&I 1985) and cases cited.

"Anticipation requires the presence in a single prior art disclosure of all elements of a claimed invention arranged as in the claim." *Connell v. Sears, Roebuck & Co.*, 220 U.S.P.Q. 193, 198 (Fed. Cir. 1983).

"This court has repeatedly stated that the defense of lack of novelty (i.e., 'anticipation') can only be established by a single prior art reference which discloses each and every element of

the claimed invention.” *Structural Rubber Prod. Co. v. Park Rubber Co.*, 223 U.S.P.Q. 1264, 1270 (Fed. Cir. 1984), citing five prior Federal Circuit decisions since 1983 including *Connell*.

In a later analogous case the Court of Appeals for the Federal Circuit again applied this rule in reversing a denial of a motion for judgment n.o.v. after a jury finding that claims were anticipated. *Jamesbury Corp. v. Litton Industrial Prod., Inc.*, 225 U.S.P.Q. 253 (Fed. Cir. 1985).

After quoting from *Connell*, “Anticipation requires the presence in a single prior art disclosure of all elements of a claimed invention arranged as in the claim,” 225 U.S.P.Q. at 256, the court observed that the patentee accomplished a constant tight contact in a ball valve by a lip on the seal or ring which interferes with the placement of the ball. The lip protruded into the area where the ball will be placed and was thus deflected after the ball was assembled into the valve. Because of this constant pressure, the patented valve was described as providing a particularly good seal when regulating a low pressure stream. The court quoted with approval from a 1967 Court of Claims decision adopting the opinion of then Commissioner and later Judge Donald E. Lane:

[T]he term “engaging the ball” recited in claims 7 and 8 means that the lip contacts the ball with sufficient force to provide a fluid tight seal. *** The Saunders flange or lip only sealingly engages the ball 1 on the upstream side when the fluid pressure forces the lip against the ball and never sealingly engages the ball on the downstream side because there is no fluid pressure there to force the lip against the ball. The Saunders sealing ring provides a compression type of seal which depends upon the ball pressing into the material of the ring. *** The seal of Saunders depends primarily on the contact between the ball and the body of the sealing ring, and the flange or lip sealingly contacts the ball on the upstream side when the fluid pressure increases. 225 U.S.P.Q. at 258.

Relying on *Jamesbury*, the ITC said, “Anticipation requires looking at a reference, and comparing the disclosure of the reference with the claims of the patent in suit. A claimed device is anticipated if a single prior art reference discloses all the elements of the claimed invention as arranged in the claim.” *In re Certain Floppy Disk Drives and Components Thereof*, 227 U.S.P.Q. 982, 985 (U.S. ITC 1985).

Claims 1-20 recite an acoustic assembly comprising an electroacoustical transducer and an acoustic element separate from the electroacoustical transducer designed and constructed to improve the acoustic performance of the electroacoustical transducer, the acoustic assembly designed and constructed to be an element of a vehicle pillar. The disclosure of the reference includes a written description in a single paragraph that reads as follows:

PILLAR TALK

All of the speakers used for sound quality purposes are stationed in the front of the vehicle, forward of the front seat. The Intrepid came with an Infinity tweeter positioned at the bottom of each A-pillar. These were removed and the resultant holes were filled with Focal Black Hole 5 sound-deadening material, as was the vacated stock-speaker location in each door. A hole was cut in each A-pillar just above the stock-tweeter location to accommodate a Focal T3X tweeter. The tweeter is countersunk into the pillar and anchored to a custom ABS-plastic base. An ABS trim ring fits around the tweeter to fill any gaps. "Then that plastic was welded to the A-pillar," Pitts details. "All of that's molded in, and the whole A-pillar is textured." A third ABS piece, the frame for the grille, sits on top of the trim ring and is held in place by each tweeter's built-in waveguides. The frame has three steel ribs arcing over it, onto which grille cloth was stretched.
P. 23.

"A reference is only good for what it clearly and definitely discloses." *In re Hughes*, 145 U.S.P.Q. 467, 471 (C.C.P.A. 1965); *In re Moreton*, 129 U.S.P.Q. 227, 230 (C.C.P.A. 1961).

Manifestly, the reference does not clearly and definitely disclose the claimed invention. The reference only discloses using the bottom of each A-pillar as a mechanical support for a tweeter. That the reference discloses avoiding using the acoustic properties of the A-pillar is evidenced by filling "the resultant holes . . . with Focal Black Hole 5 sound-deadening material. Cutting a hole just above the stock-tweeter location to accommodate a Focal T3X tweeter countersunk into the pillar and anchored to a custom ABS-plastic base" only discloses using the A-pillar for the mechanical function of supporting the tweeter and completely fails to disclose any acoustic function of the A-pillar. There is no disclosure of the waveguide being an acoustic element separate from the electroacoustical transducer. The reference discloses "each tweeter's built-in wave-guides."

The reference does not disclose a trim element for an A-pillar as disclosed and claimed in this application for a pillar forming an acoustic assembly exemplified by trim element 20 shown in FIG. 2 and described in the last full paragraph on page 3 of the specification.

Accordingly, withdrawal of the rejection of claims 1-3, 5, 6, 8, 10-14, 16, 17 and 20-24 as anticipated by the reference is respectfully requested. If this ground of rejection is repeated, the Examiner is respectfully requested to quote verbatim the language in the reference regarded as corresponding to each element in these claims.

4. Claims 25, 27 and 29 stand rejected under 35 U.S.C. §102(b) as anticipated by Atkinson. Regarding claim 25, the reference is said to disclose an automobile pillar comprising a plurality of sound sources 11, 15, 20. Regarding claim 27, the reference is said to further disclose the automobile pillar wherein a first of the sound sources comprises a first electroacoustic transducer 11 and a second of the sound sources comprises a port opening 15, 20 as claimed. Regarding claim 29, the reference is said to further disclose the automobile pillar wherein the plurality of sound sources comprises an electroacoustic transducer 11 and a waveguide opening 15, 20 as claimed. This ground of rejection is respectfully traversed.

The reference does not disclose an automobile pillar, let alone an automobile pillar comprising a plurality of sound sources as called for by these claims. Nor does the reference disclose the ports of claim 27 or the waveguide exits of claim 29. The reference identifies elements 15 and 20 as vents for the purpose of preventing compressional waves in the rear of the speaker diaphragm. Such vents are not ports or waveguide openings. Accordingly, withdrawal of the rejection of claims 25, 27 and 29 as anticipated by Atkinson is respectfully requested. If this ground of rejection is repeated, the Examiner is respectfully requested to quote verbatim language in the reference regarded as corresponding to each element in claims 25, 27 and 29.

5. Claims 4, 7, 9, 15, 18 and 19 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Newcomb. Regarding claim 4, it is said the reference does not clearly show that the acoustic element is a single-ended waveguide as claimed. Since providing a single-ended waveguide for an acoustic transducer is said to be well known in the art, therefore it is said it would have been obvious to one skilled in the art at the time the invention was made to provide

the single-ended waveguide for the acoustic assembly, in order to provide an acoustic assembly having more directional sound features.

Regarding claims 7 and 9, the reference is said to not clearly show a second electroacoustical transducer as claimed. Since it is said providing more than one speaker for an acoustic assembly is well known in the art, it is said therefore it would have been obvious to one skilled in the art at the time the invention was made to provide a desirable number of speakers, such as two for the acoustic assembly, in order to provide a multi-channel surrounding sound for users.

Regarding claim 15, the reference is said to not clearly show that the acoustic element is a single-ended waveguide as claimed. It is said that since providing a single-ended waveguide for an acoustic transducer is well known in the art it is said therefore it would have been obvious to one skilled in the art at the time the invention was made to provide the single-ended waveguide for the acoustic assembly, in order to provide an acoustic assembly having more directional sound features.

Regarding claim 18, the reference is said to disclose a structural automobile pillar containing an acoustic assembly, said acoustic assembly comprising an electroacoustical driver and an acoustic element, wherein the pillar is an A-pillar, and the acoustic assembly is a ported acoustic volume. But it is said the reference does not clearly show a second electroacoustical transducer as claimed. Since it is said providing more than one speaker for an acoustic assembly is well known in the art, it is said that it therefore would have been obvious to one skilled in the art at the time the invention was made to provide a desirable number of speakers, such as two, for the acoustic assembly, in order to provide a multichannel surrounding sound for users.

Regarding claim 19, the reference is said to further disclose the acoustic assembly wherein the acoustic assembly has a sealed acoustic volume.

This ground of rejection is respectfully traversed.

"The mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification."

In re Gordon, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984). And in *In re Kotzab*, 55 U.S.P.Q.2d 1313, 1316 (Fed. Cir. 2000), the Court said:

[I]dentification in the prior art of each individual part claimed is insufficient to defeat patentability of the whole claimed invention. *See id.* [*Dembiczak*]. Rather, to establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the applicant. *See In re Dance*, 160 F.3d 1339, 1343, 48 U.S.P.Q.2d 1635, 1637 (Fed. Cir. 1998), *In re Gordon*, 733 F.2d 900, 902, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984). Even when obviousness is based on a single prior art reference, there must be a showing of a suggestion or motivation to modify the teachings of that reference. *See B. F. Goodrich Co. v. Aircraft Braking Sys. Corp.*, 72 F.3d 1577, 1582, 37 U.S.P.Q.2d 1314, 1318 (Fed. Cir. 1996).

These claims are dependent upon claims shown above not anticipated by the reference. And nothing in the reference suggests the desirability of modifying what is there disclosed to meet the terms of these claims. Accordingly, withdrawal of the rejection of claims 4, 7, 9, 15-18 and 19 as unpatentable over the reference is respectfully requested. Should this ground of rejection be repeated, the Examiner is respectfully requested to quote verbatim language in the reference regarded as corresponding to each element in these claims, and quote verbatim the language in the reference regarded as suggesting the desirability of modifying what is there disclosed to meet the terms of these claims.

6. Claims 26 and 28 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Atkinson. The reference is said to not clearly show a second electroacoustical transducer as claimed. It is said that since providing more than one speaker for an acoustic assembly is well known in the art, therefore it is said it would have been obvious to one skilled in the art at the time the invention was made to provide a desirable number of speakers, such as two for the acoustic assembly, in order to provide an acoustic assembly with desirable frequency coverage range.

This ground of rejection is respectfully traversed. Claims 26 and 28 are dependent upon and include all the limitations of claims 25 and 27, respectively, and we have shown above that this reference cannot anticipate parent claims 25 and 27. Nothing in the reference suggests the

desirability of modifying what is there disclosed to meet the terms of claims 26 and 28. Accordingly, withdrawal of the rejection of claims 26 and 28 as unpatentable over Atkinson is respectfully requested. If this ground of rejection is repeated, the Examiner is respectfully requested to quote verbatim the language in the reference regarded as corresponding to each element in these claims and quote verbatim the language in the reference regarded as suggesting the desirability of modifying what is there disclosed to meet the terms of these claims.

The courtesy of the Examiner in making an additional diligent search is acknowledged with appreciation.

In view of the foregoing authorities, remarks and the inability of the prior art to anticipate, suggest or make obvious the subject matter as a whole of the invention disclosed and claimed in this application, all the claims are submitted to be in a condition for allowance, and notice thereof is respectfully requested. Should the Examiner believe the application is not in a condition for allowance, the Examiner is respectfully requested to telephone the undersigned attorney at (617) 521-7014 to discuss what additional steps the Examiner believes are necessary to place the application in a condition for allowance.

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No fees are believed to be due; however, the Commissioner is authorized to apply any charges to deposit account 06-1050, Order No. 02103-365001.

Respectfully submitted,

FISH & RICHARDSON P.C.

JAN - 8 2004

Date: _____



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